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10/050,101

01/18/2002

Minoru Nakano

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EXAMINER

CHAVIS, JOHN Q

ART UNIT

PAPER NUMBER

2193

MAIL DATE

DELIVERY MODE

10/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/050,101

### Applicant(s)

NAKANO, MINORU

### Examiner

John Chavis

### Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 44-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-62 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 44-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At the end of line two thru the beginning of line three of, for example, claim 44, the applicant claim "**the** semiconductor manufacturing system"; however, there is no clear antecedent basis for the system. The same type of issues exist with claim 51 and the dependent claims of each claim does not cure the problem associated with its respective parent. The applicant should further note that the "standby event, boat-up event, etc.", in claim 44, are not method steps and therefore are considered merely descriptive information that is not specifically attached to the method. The events are considered capable of being functional; however, they are not considered functional until the functions are actually implemented, for example by "**executing** a standby event..."

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **44-62** are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein (5,970,243) and further in view of the applicant's choice of which specific industrial

process is performed, **as cited in the previous action and indicated in the applicant's background (evidence to support the design choice conclusion as requested by the applicant). The previous action is hereby repeated with the response to the applicant's remarks written in bold lettering.**

Claims

44. (New) A ~~semiconductor manufacturing system method~~ for producing a substrate To be Treated using a controller for Controlling an operation of the Semiconductor manufacturing system by Carrying out a control program according To the following events comprisnig:

A standby event...

Klein

**The applicant claims a method for implementing various events and later (after all of the events have occurred) a determining step is performed. Therefore, it is not clear how the determining step is to have an affect on a step that has already occurred.** Klein does not specifically indicate the ~~semiconductor manufacturing system method~~ for producing a substrate. However, he provides for an industrial controller (see the title and the abstract). Furthermore, it is considered that various types of industrial controllers for controlling industrial processes. A semiconductor manufacturing system is also considered an industrial process and therefore, it is merely considered a choice of design to select a specific industrial process (a semiconductor manufacturing process) and its inherent features. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to select a semiconductor manufacturing system as the industrial process for its inherent features such as enabling the growing of film on a substrate to enable creation of a specific circuit.

The events listed here and below are considered inherent features in a manufacturing system and therefore, once the manufacturing system is

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selected (as the industrial process), the events are provided or enabled by default of the selection, as indicated above. **Furthermore, the specific events are considered stand alone features that are not dependent on when the control program is replaced. The only link is based on whether to interrupt a function that is executing to update the control program. The specific features of the events are considered standard for specific manufacturing processes as previously indicated (for example, see the applicant's background). Also, the feature of when to replace a program has also existed as previously indicated and as indicated in (as an example the applicant's background). The background makes it appear that the applicant is merely automating the feature in a specific manufacturing system that already exists. Therefore, it appears the applicant is merely combining two known functions, as specified in the previous action and utilizing the specific industrial process is considered merely selecting a known process and determining when to change a control program utilized in the process.**

A boat-up event...

" " "

A ramping up event...

" " "

A process event...

" " "

A ramping down event...

" " "

A boat down event...

" " "

A standby event...

" " "

|  |   |
|--|---|
| Wherein the controller includes...                   | The controller is considered part of the System and this feature is considered implemented by Klein's controllers listed in the abstract.   |
| Determining a timing...                              | See col. 2 lines 14-18.   |
| Storing the control program...                       | See col. 7 lines 8-17. The memory is also considered part of a system and is considered implemented via Klein's fig. 5 items 88 and 99. Furthermore, it appears the applicant is only mentioning one control program; therefore, it is not clear what if anything is used to change the original control program. Also, see col. 5 lines 14-19. |
| Holding <u>prior</u> data...                         | Klein is considered to teach this feature Via his maintaining of state information (holding prior data) and transferring the state information (prior data) in the abstract. That is, prior data is used.   |
| 45. (New) ...temporarily hold the Control program... | See again item 99 of fig. 8.  |

In reference to claims 46-50, see the last sentence of the abstract, which Indicates that a stop point (safe point) must be reached in order to change programs.

Claims 51-55 are taught by claims 44-50 above.

**In reference to claim 56, the system is considered capable of (operable to carry out) implementing the events. Nothing specifies that any of the events are actually implemented. Therefore, any computer system is considered "capable of" implementing events presented to it. Furthermore, see the rejection of claim 44 above. Claims 57-62 are rejected as claims 45-50.**

5. Applicant's arguments with respect to claims **44-62** have been considered but are

not persuasive.

**Conclusion**

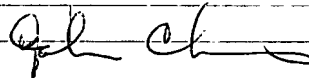
6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (703) 571-3720. The examiner can normally be reached on M-Tue & Th-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 571-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John Chavis  
Primary Examiner AU-2193